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PAPER NUMBER

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

26868 7590 Hasse & Nesbitt LLC 8837 Chapel Square Drive Suite C CINCINNATI, OH 45249 09/22/2010

EXAMINER CHU, YONG LIANG

ART UNIT

1626 DATE MAILED: 09/22/2010

 APELICATION NO.
 FILINO DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFREMATION NO.

 10558,159
 02/13/2006
 Giuseppe Caputo
 SIB-001
 5913

TITLE OF INVENTION: CYANIN-TYPE COMPOUNDS HAVING AN ALKYNYL LINKER ARM

 APPLN, TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 YES
 \$755
 \$300
 \$0
 \$1055
 12/22/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NOT THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further indicated unless correct maintenance fee notifica | ed below or directed otl | ng the Pat nerwise in | ent, advance of Block 1, by (a | rders and notification a) specifying a new o | ofn | naintenance fees w pondence address; | ill be and/or | mailed to the current (b) indicating a sepa | correspondence address as rate "FEE ADDRESS" for | |
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| CURRENT CORRESPOND | change of address) | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | | | | | |
| 26868 | 7590 09/22 | /2010 | | | | Cer | tificate | of Mailing or Trans | mission | |
| Hasse & Nesbi 8837 Chapel Sq Suite C | | | | | I her State addr trans | reby certify that the es Postal Service we ressed to the Mail smitted to the USP | is Fec(th sul Stop TO (57 | s) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the da | deposited with the United t class mail in an envelope above, or being facsimile tte indicated below. | |
| CINCINNATI, | OH 45249 | | | | | | | | (Depositor's name) | |
| | | | | | | | | | (Signature) | |
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| APPLICATION NO. | FILING DATE | | FIRST NAMED INVE | | TOR | ATTO | | RNEY DOCKET NO. | CONFIRMATION NO. | |
| 10/568,159 | 02/13/2006 | | Giuseppe Capu | | 0 | | | SIB-001 | 5913 | |
| TITLE OF INVENTION | CYANIN-TYPE COM | IPOUNDS | HAVING AN | ALKYNYL LINKEF | R AR | M | | | | |
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| | EXAMINER | | RT UNIT | CLASS-SUBCLASS | S | | | | | |
| CHU, YO | | | 1626 | 008-653000 | | | | | | |
| 1. Change of correspond CFR 1.363). | | | | (I) the names of | up to | atent front page, lis 3 registered paten | | eys I | | |
| | ondence address (or Cha B/122) attached. | | | | | | | | | |
| Tree Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Custome Number is required. | | | | registered attorney of agent) and the names of up to 2 registered patent attorneys or agents. If no name is 3 | | | | | | |
| 3. ASSIGNEE NAME A | | | | | | | | | | |
| PLEASE NOTE: Un recordation as set fort | less an assignee is ident h in 37 CFR 3.11. Com | ified below | w, no assignee this form is NO | data will appear on t T a substitute for filin | the pa | atent. If an assign | ee is io | entified below, the do | cument has been filed for | |
| (A) NAME OF ASSI | | | | (B) RESIDENCE: (0 | | | | | | |
| | | | | | | | | | | |
| Please check the appropr | iate assignee category or | categorie | s (will not be pr | inted on the patent): | ۵ | Individual Co | orporati | on or other private gro | up entity Government | |
| 4a. The following fee(s) | are submitted: | | 41 | o. Payment of Fee(s): | (Plea | se first reapply ar | ıy prev | iously paid issue fee : | hown above) | |
| ☐ Issue Fee ☐ A check is enclosed. | | | | | | | | | | |
| Advance Order | | ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | | | | | | |
| | | | | overpayment, to | Depó | sit Account Numbe | er | (enclose a | extra copy of this form). | |
| Change in Entity Sta a. Applicant claim | tus (from status indicate is SMALL ENTITY stati | | CFR 1.27. | ☐ b. Applicant is no | o lon | ger claiming SMAI | LEN | TTY status. Sec 37 CI | R 1.27(g)(2). | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if req records of the United Sta | uired) will tes Patent | not be accepte and Trademark | d from anyone other t Office. | han ti | he applicant; a regi | stered | ittorney or agent; or th | e assignee or other party in | |
| Authorized Signature | | | | | | Date | | | | |
| Typed or printed name | | | | Registration No. | | | | | | |
| | | FR 1.311. U.S.C. 12 | The information | on is required to obtain | n or r | - | | ic which is to file (and to complete, includin | by the USPTO to process) | |
| submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223 | d application form to the ions for reducing this bu 'irginia 22313-1450. DO 13-1450. | USPTO. rden, shou NOT SE | Time will vary dd be sent to th ND FEES OR | depending upon the e Chief Information C COMPLETED FORM | indiv Office IS TO | idual case. Any co r, U.S. Patent and D THIS ADDRESS | Trader S. SEN | s on the amount of tir nark Office, U.S. Depa D TO: Commissioner f | by the USPTO to process) g gathering, preparing, and ne you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450, | |

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010. OMB 0651-0033

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| APPLICATION NO | Э. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--------------------------|-----------|-------------|---------------------------------|---------------------|------------------|--|
| 10/568,159 | | 02/13/2006 | Giuseppe Caputo | SIB-001 | 5913 | |
| 26868 | 7590 | 09/22/2010 | | EXAMINER | | |
| Hasse & Nes | sbitt LLC | | CHU, YONG LIANG | | | |
| 8837 Chapel Square Drive | | | | ART UNIT | PAPER NUMBER | |
| Suite C CINCINNAT | I, OH 452 | 49 | 1626 DATE MAIL ED: 09/22/201 | 0 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 12 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 12 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/568,159 CAPUTO, GIUSEPPE Notice of Allowability Examiner Art Unit YONG CHU 1626 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 09/17/2010. 2. The allowed claim(s) is/are 4, 8-9 and 15 (renumbered as 1-4). 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 🔯 All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. T Examiner's Statement of Reasons for Allowance of Biological Material □ Other .

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DETAILED ACTION

Claims 4, 8-9 and 15 are currently pending.

Response to Amendment

The Amendment by Applicants' representative Mr. Daniel F. Nesbitt dated on 09/17/2010 has been entered.

Response to Sequencing Listing

Applicants' submission of the sequence listing on 04/19/2010 has been entered.

Response to Arguments/Amendments

Claim Rejection under 35 U.S.C. §103(a)

Applicants cancelled the rejected claims 1-2, and amended claim 4. The amended claim 4 is found allowable in view of instant Examiner's Amendment. The scope of the amended claim 4 further is further narrowed to the cyanine compounds with specific substituents of –SO₃, and two different function linkers as a dye, which are not taught and suggested by the combined prior art. Therefore, claim 4 is allowed.

Claim objections

Applicants' amendment of claim 4 obviates the objection.

Rejoinder

Claim 4 is drawn to an allowable product. Pursuant to the procedures set forth in MPEP §821.04(B), claims 8-9 and 15 drawn to the products of claim 4, conjugated

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through the linker arm $-R_1$ -C=CH with a fluorescent dye, previously withdrawn from consideration as a result of a restriction requirement, are hereby rejoined and fully examined for patentability under 37 CFR 1.104. Because a claimed invention previously withdrawn from consideration under 37 CFR 1.142 has been rejoined, the restriction requirement among groups as set forth in the Office action mailed on 10/12/2007 is hereby withdrawn. In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Examiner's Amendment

An examiner's amendment to the record with the authorization by Applicants' representative Mr. Daniel F. Nesbitt dated on 09/20/2010 appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

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In claim 4, page 5, the second last line, <u>insert</u> — wherein Z represents a leaving group—after "isothiocyanate (-CNS), epoxy and -COZ".

Conclusions

Claims 4, 8-9 and 15 are allowed.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Chu, Ph.D., whose telephone number is 571-272-5759. The examiner can normally be reached on 7:00 am - 3:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. M^GKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Status Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Yong Chu/ Primary Examiner Art Unit 1626